Plants from the Swauk. J P Shackles

I spent the summer of 1913 in the Swauk Valley. This is situated in Kittitas Co. Washington. Most of my time was in the Valley of Cougar Creek. Cougar Creek is a tributary of William's Creek which joins the Swauk at the town of Libert. These plants were collected mainly in township 21N. Range 18, E. although a few of them came from T.20 R.17.E.

The formation is Eocine and consists mainly of Sandstones, Conglomerates and Shales. The sandstones and conglomerates are above the shales and have largely been removed by erosion. A marked characteristic of the district is the abundance of dikes, by which the formation is cut, these run mostly in an east and west direction. Gold prospecting has been done all over the district, and some rich deposits have been found, but most of the gold has been taken from the old river beds which lie, buried in gravel below the present steams. The general elevation of the district is from 2400 to 4200 feet, with Table Mountain rising to the height of 6000 feet. As a rule the ridges are sharp with broad tops, rising abruptly from deep canons. There is very little land that can be cultivated, but for some years the sheep ranged over it. It now forms part of the Wenachee Forest Reserve, and there has been but little grazing upon it for some years past. At the head of Lion Gulch are one or two ranches which raise fine crops of timothy. Their average elevation is over four thousand feet. The first settlers came in here about twenty five years ago. The only inhabitants of the district at present are at Liberty and Gallagherville, and few along the Swauk and two or three families on William's Creek. The district is about twenty miles easterly from the Mt. Stuart Range. The summer temperature is not very high, we had frost every month this year. Snow lays on the ridges and in the woods until the first of June, the snow in the winter is very heavy. August was dry but we had showers through July and they began again in Sept. Vegitation extends to the top of the ridges.

I arrived in the valley about the middle of May. At that time the Snow Lilly,Erythronium grandiflorum,was in full bloom just below the banks of melting snow. I lft in the first part of September when there were few flowers in bloom except a few Anicas and Artemesia tridentata, which was coming into bloom on a ridge,where it was growing abundant ly on a shale barren,at an elevation of about 4000 feet.

Polypodiaceae.

#1 Pteris aqulina L.var.lanuginosa. This fern was abundant in the gulches but did not grow vwey tall.

Equisetaceae.

#2 Equisetum hyemale L. Var.Californicum Milde. Frequent along the water courses.

#3 Eqisetum arvense L. Very common through the region.

Pinaceae.

#4 Juniperus communis L.var.montana Ait. On Table mountain at an altitude of over five thousand feet,It was here a low bush having every appearance of having been fltttened down by the snow it was full of fruit when gathered.

#5 Abies lasiocarpa (Hook) Nutt. On Table mountain.

#6 Abies grandis Lindl. Common growing to a diameter of two feet, of little value as a fire wood.

#8 Pseudotsuga mucronata (Raf) Sudw. Common not growing to as large size as it does on the coast but regarded as a good timber tree.

#9 Pinus murrayana Engelm. Abundant on the ridges ,it is called here Jack pine. When growing in thickets it is known as lodge pole pine.

#11 Pinus ponderosa Douglas. This is the most common tree of the region and grows to a large size,is valued for its lumber and as a fire wood. It is called yellow pine,It is easily distinguished by its large cones which cover the ground beneath the trees.

#13 Larix occidentalisNutt. Common on the hill sides and sometimes growing to two feet in diameter,much valued for its timber. Larix Lyalli,was not found although one of its best known localities is only about six or eight miles west on the Teanaway.

Gramineae.

#16 Stanion glabrum J.G.Smith. Common.

#20 Glyceria grandis Wats. Common Cougar Gulch.

17 Deschampsis elongata (Hook) Munro.

18 Bromus hordeaceous L.var glabrescens (Coss) Shear. This is very common through the region where it replaces in many cases better grasses.

#19 Elymus condensatus Presl.

#21 Trisetum canescens Buckl.

#22 Agrostis alba L.

#23 Calmagrostis hyperborea Lange.

#24 Calmagrostis Suksdorfii Scribn var luxurians Kearney.

#27 Poa pratensis L. Common.

#28 Poa nervosa (Hook) Vasey.

Dactylis glomerata L. Not very common.

Phleum pratense L. Naturalized over the region,it isalso cultivated un land as high as 4200 feet above the sea.

Liliaceae.

#30 Lilium Columbianum Hanson. This is abunmant in the gulch below the mill often growing four or five feet high with six or eight flowers on a stem. The petals are curved against the stem soon after the flower opens.

#31 Allium acuminatum Hook. Growing on the barren shales above Lion gulch.

#37 Fritillaria pudica Wats. On the shale barrens.

#35 Erythronium grandiflorum Pursh. Abundant on all the ridges growing and blooming as soon as the snow is off the ground often at the very edge of the snow bank. Known locally as the Snow Lilly.

#36 Smilacina amplexicaulis Nutt.

#37 Smilacena sessilifolia Nutt.

#36 Zigadenus paniculata Wats.

#38 Veratrum californicum Durand. Very common in the gulches, when growing in the hay fields they cut it with the hay. Cattle are very fond of the dried stalks. The leaves begin to die as soon as the blossoms expand,and most of the plants are rather ragged.

Orchidaceae.

#39 Habenaria dilitata(Pursh.) Hook. var leucostachys (Lind) Ames.

#40 Habenaria unalaschensis (Speng) Wats.

#41 Cypripedium montanum Doug.

#42 Cypripedium fasiculatum Kellogg.

SALICACEAE.

Willows are abundant on the gulchs,they are the first plants to take possession of the ground after washing the gravels has ceased. No attempt was made to collect them. The most common species has the common name of "Black Willow."

#43 Populus tricocarpa Mich. At the junction of Williams Creek and the Cougar. Elevation of about 2800 feet.

#44 Populus tremuloides Mich. This is abundant on the lower part of Cougar creek.

URTICACEAE.

#47 Urtica lyallii Wats. Common in Cougar Gulch, some very fine ~~pia~~ plants near the assay office.

BETULACEAE.

BETULACEAE.

#45 Alnus sinuata (Regel) Rydb. Common on the creeks.

#46 Alnus tenuifolia Nutt. Common.

Loranthaceae.

#48 Arcanthbbium Douglasii (Eng) var laricis (Piper) Jones. A small larch tree just above the mill in Cougar Gulch was covered with many plants of it, While this tree stood in a grove of larch I did not find any other tree with the plant on it.

Polygonaceae.

#48 Eriogonum

#49 Eriogonium ovalifolium Nutt. var proliferum (T.& G.) Wats.

#51 Eriogonium heracleoides Nutt.

#52 Eriogonium compositum Doug.

#53 Eriogonium umbellatum Torr.var intectum A.Nels. On the ridge above the Brown Bear. Growing on shale barrens.

#54 Eriogonium elatum Doug. I first found this blooming on the Swauk about the first of August. Nearly a month later it was in bloom on the shale ridge above the Brown Bear. This locality is about 12200 feet higher than the Swauk.

54a Rumex salicifolius (Wien) this plant was growing just below the bungalow in the Cougar Gulch.

#55 Rumex acetosella L. This is common over the region.

#56 Polygonum littorale Pursh.

#57 Polygonum aviculare L. Common on the flat above the Cook house.

#58 Polygonum convlvulus L. On the flat below the mill growing with Chenopodium, on a manure heap

#59 Polygonium douglasii Greene.

CHENOPODIACEAE.

60 Chenopodium album L. This and the following species are common
61 Chenopodium hybridum L. on manure heaps and at the old pig pen.

CARYOPHYLLACEAE.

62 Arenaria glabrescens (Wats) Piper.
63 Arenaria capillaris Poir.var formosa Regel. Table Mountain.
64 Arenaria macrophillia Hook.
65 Stellaria jamesiana Torr.
67 Saponaria vacaria L.
68 Saponaria scouleri Hook.

PORTULACACEAE.

69 Claytonia lanceolata Pursh. Common in Cougar Gulch.
70 Montia asarifolia (Bang) Howell. Common in Cougar Gulch.
71 Montia perfoliata (Dome) Howell. " " " "

RANUNCULACEAE.

72 Aquelega formosa Fisch. Swauk above Liberty.
73 Thalictrum occidentalis Gray. Common on the Cougar.
74 Ranunculus bongardi Greene.
75 Actea spicata L.var arguta (Nutt.) Torr. Berries white.
77 Aconitum columbianum Nutt. Common on Cougar Creek and Gulch.
78 Delphinum scopulorum Gray,var glaucum Gray. Not common.
79 Delphinum bicolor Nutt. Top of ridge above Cougar,4000 feet.
81 Achlys triphylla (Smith) D.C.

BERBERIDACEAE.

Berberis repens L. Common on the hills around Cougar Gulch.

CRUCIFERAE.

82 Capsella bursa-pastoris (L) Medic. Common about the Guleh.

83 Arabis holboellii Hornem.

85 Arabis arcuata Gray.

87 Arabis hirsuta Scop.

89 Arabis glabra(L.) Bernh.

94 Brassica campestris L.

96 Sisymbrium incisum Engl.

98 Sisymbrium incisum Engl.var filipes Gray.

CRASSULACEAE.

99 Sedum douglasii Hook.

SAXIFRAGACEAE.

100 Mitella trifida Graham.

102 Tellima parviflora Hook.

103 Philadelphus lewisii Pursh. This very frgrant. Common on hills.

104 Heuchera glabella T.& Gray.

GROSSULARIACEAE.

101 Ribes petiolare Doug.

105 Ribes cereum Doug. Common on the hill tops.

107 Ribes lacustra (Pera.) Poir.

POMACEAE.

109 Pyrus sitchensis (Roem) Piper.

110 Amalanchier florida Lindl. Very common it did not fruit much this year it was too dry,the chipmunks took care of the few berries that ripened.

ROSACEAE.

106 Purshia tridentata (Pursh.) D.C. Common on hills.

113 Rosa gymnocarpa Nutt.

129 Rosa nutkana Presl. Very common.

130 Rosa pisocarpa Gray.

112 Holodiscus discolor (Pursh.) Maxim. Very common in Cougar some plants were ten feet high and covered with flowers.

114 Spirea lucida Doug. Abundant in Cougar Gulch.

118 Spirea menziesii Hook. Common Cougar Gulch.

119 Crataegus douglassi. Lindl. Not common. Cougar Gulch.

120 Fragaria platypetala Rydh. Very common Cougar Gulch fruit small.

121 Rubus parviflorus Nutt. Very common but it does not produce edible fruit. The fruit is orange yellow.

122 Rubus ursinus C.& S. Not common . Below the mill.

123 Rubus idaeus L. Lion Gulch.

124 Geum macrophyllum Wild. Common in Cougar Gulch.

125 Potentilla blaschkearia Trutz.

126 Potentilla gracilis Doug.

126 Potentilla wrangelliana Tisch & Lall.

DRUPACEA.

137 Prunus emarginata (Doug) Walp.

PAPILIONACEAE.

132 Trifolium repens L. Commong along the roads.

Trifolium pratense L. Frequent.

133 Trifolium hybridum L. Common.

135 Lupinus laxiflorus Doug. Very common up to 4000 feet.

137 Astragalus hookerianaus Gray. Near the top of Table Mountain.

138 Lathrus palustrus L.

139 Lathrus cornaceus Waits.

141 Lathrus nutalli Wats.

140 Vica Americana Muhl.

GERANIACEAE.

145 Geranium incisum Nutt. Common up to about 3000 feet Cougar and Swauk. It begins to bloom a month earlie on the Swauk prarie than it does on Cougar.

146 Geranium bicknellia Britton.

MALVACEAE.

147 Sphaeralcea acerifolia Nutt. Cougar Creek.

RHAMNACEAE.

148 Ceanothus velutinus Doug. Sticky Laurel. Common Cougar Gulch An evergree bush,flowering before the new leaves develope in the spring.

149 Ceanothus sanguineus Pursh.

Loasaceae.

151 Mentzelia laevicaulis (Doug.) T.& G. on an old dump below Galagherville. The prople here insist that the seeds for this must have been dug with the gravel as it does not occur else where in the valley. Probably brought by sheep.

152 Mentzelia albicaulis (Doug.) var genuina Urb. & Gilig.

VIOLACEAE.

153 Viola adunca Sm?

154 Viola Nutalli Pursh.

155 Viola glabella Nutt.

ONAGRACEAE.

156 Circeae pacifica Acherson & Magners.

157 Epilobium angustifolium L. Very common. Growing six feet high.

158 Epilobium paniculatum Nutt.

160 Epilobium delicatum Tr.

161 Epilobium adencaulum Hanssk.

APIACEAE.

162 Lomatum triternatum (Pursh.) C.& R.

164 Lomatium nudicaulis (Pursh) C.& R.

168 Lomatium farnosum (Geyer) c.& R.

163 Pteryxia terebinthina (Hook,) C.& R. Top of table mountain.

Umbellifera.

165 Angelica canbyi C.& R.

166 Angelica lyallii Wats.

167 Osmohrrhiza occidentalis Nutt.

CORNACEAE.

169 Cornus stolonifera Mich. Very common on the steams.

PYROLACEAE.

170 Pterospora andromeda Nutt. Frequent Cougar Creek.

171 Pyrola picta Smith. Frequent near the shaft house.

172 Pyrola secunda L.

174 Chimaphila umbellata Nutt.

CELASERACEAE.

175 Pachistima myrisinatus Raf.

ERICACEAE.

176 Archostaphylos nevadensis Gray.

VACCINACEAE.

178 Vaccinium myrtellus L.

PRIMULACEAE.

179 Dodecanthem dentatum Hook. Cougar Creek near the cook house.

180 Trientalis latifolia Hook.

APOCYNACEAE.

181 Apocynum androsaemifolim L.var pumilium Gray.

182 Apocynum androsaemifolium L.

POLEMONIACEAE.

183 Gilia aggregata (Pursh.) Spring.

184 Polemonium humile R.& G. Table Mountain.

185 Collomia grandiflora Doug.

186 Collomia lenearis Nutt.

HYDROPHYLLACEAE.

188 Phacelia hetrophylla Pursh.

193 Phacelia linearis (Pursh.) Holzinger.

191 Hydrophyllum capitatum Doug.

192 Hydrophyllum albifrons Heller.

BORAGINACEAE.

194 Lappula diffusa Lehm.

195 Cryptanthe affinis (Gray) Greene.

197 Cryptanthe torreana (Gray.) Greene.

199 Lithospermum ruderale Doug.

LABIATAE.

201 Stachys ciliata Doug.

202 Prunella vulgaris L. var lanceolata (Barton) Fernald,forma idocalyx Fernald.

203 Nepeta cataria L. Swauk Canon. below Liberty.

SCROPHULARIACEAE.

204 Mimulus mochatus Doug. Around the dam at the mill.

205 Mimulus nasutus Greene.

206 Pedicularis racemosa Doug. Cougar Gulch,near mill.

208 Pedicularis contorta Doug.

207 Pedicularis bracteosa Benth. Lion Creek.

209 Castllea angustifolia (M.& Day.) var bradburia Fernald.

212 Castillea minita Doug.

SCROPHULARIACEAE.

213 Pentstemon fruticosa (Pursh.) Greene.

214 Pentstemon confertus Doug.

215 Pentstemon atenuatus Doug.

218 Veronica americana Schwein.

219 Veronica humifusa Dickson.

221 Colinsia tenella (Pursh) Piper.

Verbascum thapsus L. Common.

CAPRIFOLIACEAE.

225 Linnaeae borealis L.var americana (Forbes) Relider.

226 Lonicera ciliosa (Pursh) Poviet.

227 Lonicera involucrata Banks.

229 Symphoricarpus racemosa Mx.

230 Symphoricarpus vaccinoides Rydb.

231 Sambucus glauca Nutt.

RUBIACEAE.

232 Galium aparine L.

VALERIANACEAE,

234 Valeriana sitchensis Bong.

235 Valeriana occidentalis Heller.

COMPOSITAE.

236 Circium eduleNutt. Very common . Tall and sometimes branched.

237 Taraxacum officinale Weber. Very common. Has become a pernicius weed in the Swauk valley.

238 Solidago elongata Nutt. Very abundant in Cougar valley.

242 Arnica aurantiaca Greene,

268 Arnica cordifolia Hook.

275 Arnica parryia Gray.

243c Erigeron bloomeri Gray.

246 Erigeron macracanthus Nutt.

244 Aplopapus greenii Gray.

245 Aster ascendens Lindl.

247 Aster Modestus Lindl.

249 Aster occidentalis Nutt.

249a Aster fremontii Gray.

250 Aster conspicuus Lindl.

253 Aster foliaceous Lindl.

252 Aster engelmanni Gray.

253 Antánaria rosea (Eaton) Greene.

284 Antennaria luzuloides T.& G.

255 Antennaria racemosa Hook.

256 Antennaria concolor Piper.

258 Anaphalis margaritaceae Hook. var occidentalis Greene.

259 Artemesia ludoviciana Nutt.

260 Artemesia tridentata Nutt.

261 Madia dissitifolia (Nutt) T.& G.

284 Madia glomerata Hook.

262 Anthemis cotula L.

263 Matricaria saveolens (Pursh.) Buchenen.

264 Rudbeckia montana Gray. This is common up to 4000 feet .The honey bees seem very fond of the blossom and seem to be stupified by it.

265 Achilles lanulosa Nutt. This is the most common plant in Sept. and late August . It is found in all parts of the valley to the top of Table Mountain. The specimens were examined by Mr. Fernald.

266 Helianthella douglasii T.& G.

267 Balsamorhiza saittata (Pursh) Nutt. 4000 feet near Brown Bear.

269 Eriophyllum lanatum (Pursh) Forbes.

270 Senecio cymbalarioides Nutt.

271 Senecio hookeri T.& Gray.

272 Senecio serra Hook.

274 Adenocaulon bicolor Hook.

275 Calcaliopsis nardosima Gray.

278 Sonchus asper (L.) Hill.

280 Microseris nutans (Gray.)Sch.Bip.

281 Agoseris gracilens (Gray.) Ryder.

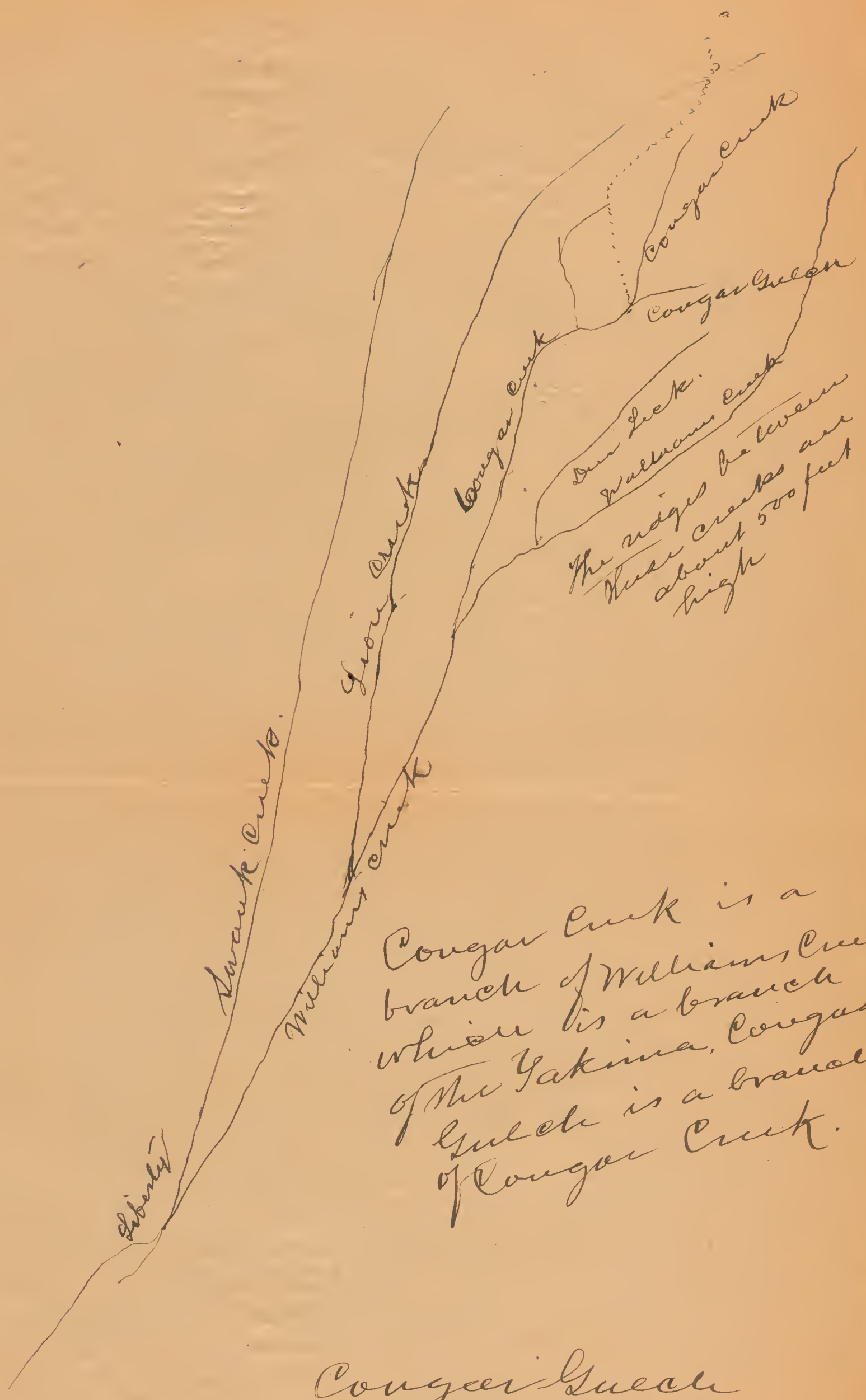
281 Agoseris (Hook.) Greene.

282 Hieraceum albiflorum Hook.

283 Hieraceum griseum Rydb.

My thanks are due to Mr. Torrey for his careful comparison of these specimens with the Herbarium at Cambridge.

Sharples –



Cougar Creek is a branch of Williams Creek which is a branch of the Yakima. Cougar Gulch is a branch of Cougar Creek.

Cougar Gulch
Kittitas Co.
Washington

Aug 1913

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